type of electrical-equipment enclosure (drip-proof, watertight, or the like).

- (iii) Switchboard plans required by paragraphs (e) and (f) of §110.25–1 of this chapter.
- (2) For each vessel of 100 or more gross tons, the plans required by §110.25 of this chapter must be submitted.
- (f) Automation. For each vessel of 100 or more gross tons, where automated systems are provided to replace specific personnel in the control and observation of the propulsion systems and machinery spaces, or to reduce the level of crew associated with the engine department, the following plans must be submitted:
- (1) Plans necessary to demonstrate compliance with subpart D of part 130 of this subchapter.
  - (2) Automation-test procedure.
  - (3) Operations manual.

# § 127.120 Procedure for submittal of plans.

If a vessel is to be constructed, altered, or repaired, the plans, information, and calculations required by this part must be submitted—

- (a) To the OCMI in the zone where the vessel is to be constructed, altered, or repaired; or
- (b) By visitors to the U.S. Coast Guard Marine Safety Center, 1900 Half Street, SW., Suite 1000, Room 525, Washington, DC 20024, or by mail to: Commanding Officer, U.S. Coast Guard Marine Safety Center, 2100 2nd St. SW., Stop 7102, Washington, DC 20593-7102, in a written or electronic format. Information for submitting the VSP electronically can be found at <a href="http://www.uscg.mil/HQ/MSC">http://www.uscg.mil/HQ/MSC</a>.

[USCG-2007-29018, 72 FR 53966, Sept. 21, 2007, as amended by USCG-2009-0702, 74 FR 49235, Sept. 25, 2009]

# Subpart B—Particular Construction and Arrangements

## §127.210 Structural standards.

(a) Except as provided by paragraphs (b) and (c) of this section, compliance with the construction and structural rules established by the American Bureau of Shipping and incorporated by reference in §125.180 is acceptable for the design and construction of an OSV.

- (b) The current standards of other recognized classification societies, or any other established current standard, may also be used upon approval by the Commandant (CG-521).
- (c) If no established current standard for design is used, detailed design calculations must be submitted with the plans required by §127.110 of this part.
- (d) The plans required by §127.110 of this part should specify their standard for design.

[CGD 82-004 and CGD 86-074, 62 FR 49328,
Sept. 19, 1997, as amended by USCG-2009-0702,
74 FR 49235, Sept. 25, 2009

# §127.220 General fire protection.

- (a) Each vessel must be designed and constructed to minimize fire hazards, as far as reasonable and practicable.
- (b) Exhausts of internal-combustion engines, galley uptakes, and similar sources of ignition must be kept clear of and insulated from woodwork and other combustible matter.
- (c) Paint lockers and similar compartments must be constructed of steel or be wholly lined with steel.
- (d) Except as provided by paragraph (e) of this section, when a compartment containing the emergency source of electric power, or vital components of that source, adjoins a space containing either the ship's service generators or machinery necessary for the operation of the ship's service generators, each common bulkhead and deck must be of "A-60" Class construction as defined by §72.05–10 of this chapter.
- (e) The "A-60" Class construction required by paragraph (d) of this section is unnecessary if the emergency source of electric power is in a ventilated battery locker that—
  - (1) Is located above the main deck;
  - (2) Is located in the open; and
- (3) Has no boundaries contiguous with other decks or bulkheads.

### §127.230 Subdivision and stability.

Each vessel must meet the applicable requirements in subchapter S of this chapter.

#### § 127.240 Means of escape.

(a) Except as provided by paragraphs (l) and (m) of this section, there must

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be at least two means of escape, exclusive of windows and portholes, from each of the following spaces:

- (1) Each space accessible to offshore workers.
- (2) Crew accommodations and each space where the crew may normally be employed.
- (b) At least one of the two means of escape must—
- (1) Be independent of watertight doors in bulkheads required by part 174 of this chapter to be watertight; and
- (2) Lead as directly to the open deck as practicable.
- (c) The two means of escape required by paragraph (a) of this section must be widely separated and, if possible, at opposite ends or sides of the space, to minimize the possibility that one incident will block both escapes.
- (d) Except as provided by paragraph (e) of this section, a vertical ladder ending at a deck scuttle may not be either of the means of escape required by paragraph (a) of this section.
- (e) A vertical ladder ending at a deck scuttle may be the second means of escape if the—
- (1) Primary means of escape is a stairway or passageway;
- (2) Installation of another stairway or passageway is impracticable;
- (3) Scuttle is located where stowed deck cargo could not interfere;
- (4) Scuttle is fitted with a quick-acting release, and with a hold-back device to hold it open; and
- (5) Scuttle meets the requirements for location, strength, and height of coaming in subchapter E of this chapter.
  - (f) Each vertical ladder must—
  - (1) Have rungs that are—
- (i) At least 410 millimeters (16 inches) long;
- (ii) At most 300 millimeters (12 inches) apart, uniform for the length of the ladder: and
- (iii) At least 180 millimeters (7 inches) from the nearest permanent object in back of the ladder;
- (2) Have at least 115 millimeters (4½ inches) of clearance above each rung:
- (3) Be made of incombustible materials: and
- (4) Have an angle of inclination with the horizontal, greater than 70 degrees but not more than 90 degrees.

- (g) No means may be provided for locking any interior door giving access to either of the two required means of escape, except that a crash door or locking-device, capable of being easily forced in an emergency, may be employed if a permanent and conspicuous notice to this effect is attached to both sides of the door. A means may be provided for locking an exterior door to a deckhouse if the door is—
- (1) Locked only by a key under the control of one of the OSV's officers; and
  - (2) Always operable from the inside.
- (h) Each passageway or stairway must be wide enough to provide an effective means of escape for the number of persons having access to it even if each person is wearing a lifejacket. There must be no protrusions in the means of escape that could cause injury, ensnare clothing, or damage lifejackets.
- (i) No interior stairway, other than within the machinery spaces or cargo holds, may be less than 710 millimeters (28 inches) wide. The angle of inclination of each stairway with the horizontal must not exceed 50 degrees.
- (j) No dead-end passageway, or equivalent, may be more than 13.1 meters (40 feet) in length.
- (k) Vertical access must be provided between the various weather decks by means of vertical or permanently inclined ladders. The angles of inclination of the inclined ladders with the horizontal must not exceed 70 degrees, except that vertical ladders may be used for access to pilot-house tops and other house tops used only for weather protection.
- (1) Only one means of escape need be provided from each of the spaces stipulated in paragraph (a) of this section, provided the maximum area of each space is less than 28 square meters (300 square feet) and the maximum dimension (length, breadth, or depth) of each space is less than 6 meters (20 feet).
- (m) Alternative means of escape from spaces may be provided if acceptable to the cognizant OCMI.